R E P O R T R E S U M E S

ED 019 069 JC 680 148

TECHNICAL EDUCATION--LESS-THAN-BACCALAUREATE LEVEL PROGRAMS IN HIGHER EDUCATION.

BY- MARTIN, ROBERT R.
EASTERN KENTUCKY STATE COLLEGE, RICHMOND

EDRS PRICE MF-$0.25 HC-$1.16 27P.

DESCRIPTORS- *HIGHER EDUCATION, *STATE UNIVERSITIES, *STATE COLLEGES, *TECHNICAL EDUCATION, *PROGRAM LENGTH,

WHEN A QUESTIONNAIRE WAS SENT TO 367 COLLEGES AND UNIVERSITIES TO DETERMINE THE EXTENT OF CURRENT INVOLVEMENT AND PROJECTIONS FOR FUTURE INVOLVEMENT IN LESS THAN BACCALAUREATE DEGREE TECHNICAL EDUCATION PROGRAMS, 282 INSTITUTIONS (76.8 PERCENT) RESPONDED. APPROXIMATELY ONE-THIRD OF THE RESPONDENTS OFFERED NO TECHNICAL PROGRAMS, AND TWO-FIFTHS OFFERED LESS THAN BACCALAUREATE TECHNICAL PROGRAMS. MORE THAN HALF OF THE COLLEGES WITH OVER 10,000 STUDENTS OFFERED SUCH PROGRAMS. OF THE 619 PROGRAMS IDENTIFIED, 575 WERE OF TWO YEARS OR LESS. APPROXIMATELY HALF OF THE RESPONDENTS PLANNED TO ADD OR EXPAND PROGRAMS. IN THOSE COLLEGES NOT PLANNING TO ADD OR EXPAND PROGRAMS, LACK OF DEMAND AND ALLOCATION OF THE TECHNICAL EDUCATION FUNCTION TO OTHER EDUCATIONAL INSTITUTIONS WERE GIVEN AS THE REASONS. (WO)

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ED019069

TECHNICAL EDUCATION: LESS-THAN-BACCALAUREATE LEVEL PROGRAMS IN HIGHER EDUCATION

Prepared by

Eastern Kentucky University
Richmond, Kentucky 40475

In Cooperation with the

Association of State Colleges and Universities
1785 Massachusetts Avenue, N. W.
Washington, D. C. 20036

and the

National Association of State Universities and Land Grant Colleges
1785 Massachusetts Avenue, N. W.
Washington, D. C. 20036

JC 680 148

UNIVERSITY OF CALIF.
LOS ANGELES

MAR 22 1968

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

FOREWORD

The results of this study are provided as an indication of the current and projected future involvement of institutions of higher education in technical education programs of less-than-baccalaureate level.

Credit is due Dr. Allan W. Ostar, Executive Director, Association of State Colleges and Universities and Dr. John D. Rowlett, Dean, College of Applied Arts and Technology, Eastern Kentucky University, for their initial interest and support throughout the project. Credit is also due Dr. William E. Sexton, Chairman, Industrial Technology Department, Eastern Kentucky University, who conducted the investigation and prepared the final report.

Finally, I wish to acknowledge my special indebtedness to the individual representatives of the many colleges and universities who provided the data for this report. Without their interest and assistance, this project would not have been possible.

ROBERT R. MARTIN, President
Eastern Kentucky University

INTRODUCTION

Eastern Kentucky University recently cooperated with the Association of State Colleges and Universities and the National Association of State Universities and Land Grant Colleges in a research project designed to ascertain the status of less-than-baccalaureate level technical education programs in institutions of higher education.

It was believed that such a study would give adequate recognition nationally to the role played by state and land grant colleges and universities in meeting educational needs at less-than-baccalaureate degree levels. Further, it was contended that information thus gained might be used by the two associations during the course of their deliberations with congressional committees and other federal agencies.

Purposes of the Study

The purposes of the study were to ascertain (1) the extent of current involvement nationally in less-than-baccalaureate degree level technical education programs and (2) the projected extent of involvement in these programs by 1970. Answers to the following questions were sought:

1. To what extent are member institutions of the ASCU and the NASULGC involved in technical education programs of less-than-baccalaureate level on the main campus and in off-campus centers?

2. What is the current pattern regarding the planned duration of technical education curricula?

3. What is the current student enrollment in technical education programs of less-than-baccalaureate level?

4. To what extent will technical education programs of less-than-baccalaureate level increase or decrease, by 1970, in institutions currently offering such programs?

5. To what extent will technical education programs of less-than-baccalaureate level be added, by 1970, to the curriculum of institutions not offering such programs at present?

Definition of Terms

For the purposes of this study, technical education programs were defined as those occupational curricula that combine general education with technical information and practical skill development experiences necessary for individuals who wish to enter into and subsequently succeed in occupations that require an understanding of the laws of science and technology and their application in our society.

Limitations of the Study

This study was limited to the 367 colleges and universities in the United States and its territorial possessions classified as members or eligible nonmembers of the Association of State Colleges and Universities and the National Association of State Universities and Land Grant Colleges.

Secondly, the study was necessarily limited to the extent to which respondents correctly interpreted and supplied valid responses to items appearing on the information forms.

Finally, the validity of data evolving from the study was limited to the extent that the colleges and universities participating in the study accurately represented the institutions offering technical education programs of less-than-baccalaureate level.

SOURCES OF DATA AND METHOD OF STUDY

Participating Institutions

Colleges and universities invited to participate in the study were limited to those reported as members or eligible nonmembers of the Association of State Colleges and Universities and the National Association of State Universities and Land Grant Colleges. An introductory letter[1], together with a copy of "Information Form for Technical Education Programs of Less Than Baccalaureate Level Offered On the Main Campus"[2] and "Information Form for Technical Education Programs of Less Than Baccalaureate Level Offered Off the Main Campus,"[3] and an addressed return envelope was mailed to the administrative head of the 367 colleges and universities on February 1, 1967.

As indicated in Table I, completed forms were returned by representatives of 282 institutions. This group represented 76.8 per cent of the institutions contacted.

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[1]See Appendix A, p. 23, for copy of introductory letter.

[2]See Appendix B, p. 24, for copy of information form.

[3]See Appendix C, p. 25, for copy of information form.

TABLE I

DISTRIBUTION OF ELIGIBLE AND PARTICIPATING INSTITUTIONS

State or Territory	Number of Institutions		Per Cent of Response
	Eligible and Contacted	Participated	
Alabama	10	8	80.0
Alaska	1	1	100.0
Arizona	3	3	100.0
Arkansas	8	7	87.5
California	21	15	71.4
Colorado	9	6	66.7
Connecticut	5	3	60.0
Delaware	2	2	100.0
District of Columbia	1	1	100.0
Florida	5	4	80.0
Georgia	13	10	76.9
Guam	1	0.	00.0
Hawaii	1	0	00.0
Idaho	2	1	50.0
Illinois	8	5	62.5
Indiana	5	5	100.0
Iowa	3	2	66.7
Kansas	7	6	85.7
Kentucky	6	5	83.3
Louisiana	9	8	88.9
Maine	7	5	71.4
Maryland	8	3	37.5
Massachusetts	15	11	73.3
Michigan	10	5	50.0
Minnesota	6	5	83.3
Mississippi	8	7	87.5
Missouri	8	5	62.5
Montana	6	5	83.3
Nebraska	5	2	40.0
Nevada	1	1	100.0
New Hampshire	3	3	100.0
New Jersey	8	6	75.0
New Mexico	6	4	66.7
New York	14	11	78.6
North Carolina	13	9	69.2

TABLE I (continued)

DISTRIBUTION OF ELIGIBLE AND PARTICIPATING INSTITUTIONS

State or Territory	Number of Institutions		Per Cent of Response
	Eligible and Contacted	Participated	
North Dakota	7	6	85.7
Ohio	8	7	87.5
Oklahoma	9	7	77.8
Oregon	6	6	100.0
Pennsylvania	15	14	93.3
Puerto Rico	1	0	00.0
Rhode Island	2	2	100.0
South Carolina	4	4	100.0
South Dakota	7	5	71.4
Tennessee	7	7	100.0
Texas	20	15	75.0
Utah	4	3	75.0
Vermont	4	4	100.0
Virginia	9	5	55.6
Washington	5	5	100.0
West Virginia	10	9	90.0
Wisconsin	10	8	80.0
Wyoming	1	1	100.0
Total	367	282	76.8

Treatment of Data

Since it was initially assumed that completed forms would be received from institutions ranging in size from small colleges to large universities, it was believed that tabulation of data on some basis of institutional size would be both desirable and feasible. Since, further, total student enrollment was an reported item on the information forms, this figure was arbitrarily employed as an index of institutional size. Consequently, data were classified in four enrollment categories, (1) less than 5,000, (2) 5,000 - 10,000, (3) 10,000 - 15,000, and (4) over 15,000. The subsequent distribution of participating institutions by enrollment and institutional classification is indicated in Table II.

Completed information forms and explanatory letters received from the 282 participating institutions constituted the only sources of data for the study. All data collected were classified, tabulated and treated in a manner designed to facilitate presentation in tabular form.

TABLE II

ENROLLMENT SIZE AND CLASSIFICATION OF PARTICIPATING INSTITUTIONS

Institutional Enrollment	Institutional Classification		Total
	Member or Eligible Nonmember of ASCU	Land Grant	
Less than 5,000	137	12	149
5,000 - 10,000	65	12	77
10,000 - 15,000	16	9	25
Over 15,000	15	16	31
Total	233	49	282

STATUS OF LESS-THAN-BACCALAUREATE LEVEL TECHNICAL EDUCATION IN HIGHER EDUCATION

of Current Technical Education Programs

Of the participating institutions, approximately one-third (34.4 per cent), did not offer technical programs at any level. Seventy-one, or 38.4 per cent, of the one hundred eighty-five institutions that did offer technical education programs provided these at the baccalaureate level only.

TABLE III

LEVEL OF TECHNICAL EDUCATION PROGRAMS OFFERED ON AND OFF THE MAIN CAMPUS IN PARTICIPATING INSTITUTIONS

	Number of Institutions By Enrollment					
Program Level	Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000	Total	Per Cent Of Total (282)
Baccalaureate level only on campus	32	23	8	8	71	25.2
Less-than-baccalaureate level only					43	15.2
on campus	16	12	4	3		
off campus	1		2	3		
on and off campus	1			1		
Both baccalaureate and less-than-baccalaureate level					71	25.2
on campus only	23	27	6	6		
both on and off campus	3	1	1	4		
No technical education offered	73	14	4	6	97	34.4
Total	149	77	25	31	282	100.0

Consequently, less-than-baccalaureate level technical education programs were available in approximately two-fifths (40.4 per cent) of the participating institutions.

Table III indicates that whereas less-than-baccalaureate level technical education programs were available in only 32.2 per cent of the institutions with enrollments up to 10,000, such programs were available in 53.6 per cent of the institutions with enrollments exceeding 10,000. These data further reveal that although technical education is not available in less than one-fifth (17.8 per cent) of the institutions with enrollments exceeding 10,000, such educational opportunity is not available in almost two-fifths (38.5 per cent) of the institutions with less than 10,000 students.

Program Duration of Current Offerings

Data presented in Table IV clearly indicate that a large majority, 81.6 per cent, of the available technical programs of less-than-baccalaureate level was of two years' duration. Further, 108, or 62.8 per cent, of the institutions offering technical education programs at this level scheduled from one to thirty-two programs of this length in their curriculum.

Program duration was concentrated between lengths of one and two years with only 6.9 per cent of all programs greater than two years in length and 2.1 per cent less than 1 year in duration.

TABLE IV

DURATION OF PROGRAMS PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Program Duration	Number of Programs In Institutions With Enrollments: Less Than 5,000	5,000 to 10,000	10,000 to 15,000	Over 15,000	Total	Number of Institutions	Range	Mean
More than 3, less than 4 years		4	2		6	3	1-3	2.0
3 years	16	16	1	3	36	19	1-5	1.9
2 1/2 years		1			1	1	-1	1.0
2 years	210	158	58	79	505	108	1-32	4.7
1 1/2 years				6	6	2	2-4	3.0
1 1/3 years	7				7	1	-7	7.0
1 year	16	16	4	9	45	28	1-9	1.6
2/3 year				1	1	1	-1	1.0
Less than 1/2 year	5	2	1	3	11	8	1-3	1.4
Unspecified duration		1			1	1	-1	1.0
Total	254	198	66	101	619	172	1-32	3.6

Student Enrollment in Present Programs

Table V indicates that a large majority of the students enrolled in less-than-baccalaureate level technical education programs, 81.4 per cent, was registered in curricula of two years' duration. Of the 31,551 persons enrolled in programs leading to less than a baccalaureate degree, only 2.5 per cent were following curricula which required less than one year to complete.

Since no enrollment data were provided for 45 of the 619 programs reported, the total enrollment figures shown in Table V represent those recorded in 574 programs, or a mean enrollment of approximately 55 students per program. Using this figure as an average enrollment figure for the 45 unreported programs, it may be hypothesized that a total of approximately 34,326 students were enrolled in less-than-baccalaureate level programs in participating institutions.

TABLE V

STUDENT ENROLLMENT IN PRESENT PROGRAMS

Duration Of Present Programs	Total Student Program Enrollment	Student Program Enrollment In Institutions With Enrollment				No Enrollment Data Given Total Number Of Programs
		Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000	
More than 3, less than 4 years	1,518		1,200	318		
3 years	1,582	304	1,257	20	1	2
2 1/2 years	45		45			
2 years	25,668	7,828	5,361	2,959	9,520	29
1 1/2 years	154				154	
1 1/3 years						7
1 year	1,697	536	746	72	343	3
2/3 year	190				190	
Less than 1/2 year	697	322	65	25	285	3
Unspecified duration						1
Total	31,551	8,990	8,674	3,394	10,493	45

Addition or Expansion of Less-Than-Baccalaureate Level Technical Programs in Institutions Currently Offering Such Programs

Tables VI, VII and VIII reveal data regarding the plans of participating institutions currently offering technical education programs of less-than-baccalaureate level to extend these programs by 1970. As indicated, approximately one-half (49.1 per cent) plan additions to or expansion of existing programs. Of those that do not have plans in this direction, over one-half indicated that (1) delegation of the technical education function to other state institutions, (2) insufficient demand for additional programs and (3) a sufficient number of programs presently offered were reasons for this decision.

TABLE VI

ADDITION OR EXPANSION OF LESS-THAN-BACCALAUREATE LEVEL TECHNICAL EDUCATION PROGRAMS IN INSTITUTIONS PRESENTLY OFFERING SUCH PROGRAMS

Institutional Enrollment	Plan To Add Or Expand Programs	Do Not Plan To Add Or Expand Programs	Unknown Or No Response	Total
Less than 5,000	27	14	3	44
5,000 - 10,000	17	15	8	40
10,000 - 15,000	5	7	1	13
Over 15,000	7	5	5	17
Total	56	41	17	114

Of the 134 programs to be added or expanded by 1970, 103, or 76.9 per cent, are planned to be of two years' duration and 124, or 92.7 per cent, are to be of one year or more in length. A majority of the planned programs,

TABLE VII

PROGRAM DURATION AND YEAR TECHNICAL EDUCATION PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL ARE TO BE ADDED OR EXPANDED IN INSTITUTIONS PRESENTLY OFFERING SUCH PROGRAMS

Planned Program Duration	Year Programs Are To Be Added Or Expanded In Institutions With Enrollment																Program Total
	Less than 5,000					5,000 - 10,000					10,000 - 15,000					Over 15,000					
	67-68	68-69	69-70	Yr. Unk.	Total	67-68	68-69	69-70	Yr. Unk.	Total	67-68	68-69	69-70	Yr. Unk.	Total	67-68	68-69	69-70	Yr. Unk.	Total	
3 years		1	2	2	5		1			1							5			5	11
2 1/2 years	3	1			4																4
2 years	10	19	5	6	40	11	10	6	8	35	5	4	2		11	3	8	4	2	17	103
1 1/2 years																1	1			2	2
1 year	2	1	1		4																4
Unknown	1	2		4	7				3	3											10
Totals: 67-68	16					11					5					4					36
68-69		24					11					4					14				53
69-70			8					6					2					4			20
Yr. Unk.				12					11										2		25
Program Total					60					39					11					24	134

66.4 per cent, are to be implemented by the end of the 1968-1969 school year.

It is significant to note that institutions with a current enrollment of less than 10,000 comprised 78.6 per cent of the group planning additional programs; further, this group planned 73.9 per cent of the new or expanded programs anticipated by 1970.

TABLE VIII

REASONS WHY LESS-THAN-BACCALAUREATE LEVEL TECHNICAL EDUCATION PROGRAMS ARE NOT TO BE ADDED OR EXPANDED IN INSTITUTIONS PRESENTLY OFFERING SUCH PROGRAMS

Reasons Given For No Addition Or Expansion Of Programs	Frequency Of Response By Institutional Enrollment: Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000	Total
Technical education is a function delegated to other institutions in the state	6	6	2	6	20
Insufficient demand for additional programs	7	3	1		11
Sufficient number of programs are presently offered	3	5	2		10
Insufficient funds are available	5	3			8
Lack of student interest in present programs	1	3	1		5
Emphasis is to be placed on baccalaureate programs	1	3	1		5
Inadequate facilities are available	1	4			4
Technical education is inconsistent with institutional purposes	2	1	1		4
Difficult to locate qualified staff	1	1			2
Program planning controlled by coordinating council		1			2

TABLE VIII (continued)

REASONS WHY LESS-THAN-BACCALAUREATE LEVEL TECHNICAL EDUCATION PROGRAMS ARE NOT TO BE ADDED OR EXPANDED IN INSTITUTIONS PRESENTLY OFFERING SUCH PROGRAMS

Reasons Given For No Addition Or Expansion Of Programs	Frequency of Response By Institutional Enrollment				
	Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000	Total
Insufficient demand for graduates of such programs	1				1
Demand is for baccalaureate level graduates	1				1
Problem is under advisement	1				1
Four-year programs overshadow two-year		1			1
Present program being phased out			1		1
Total	31	30	9	6	76

Addition of Less-Than-Baccalaureate Level Technical Programs in Institutions Not Presently Offering Such Programs

Tables IX, X and XI provide data concerning the plans of participating institutions not offering technical education programs to add these programs by 1970. Only 13, or 7.7 per cent, of the institutions in this group planned to add technical education to their curriculum. Of the 40 programs anticipated, 25, or 62.5 per cent, are to be of two years' duration and 35, or 87.5 per cent, will be one year or greater in length.

Participating institutions indicated, with greatest frequency, that the major reasons for not adding technical programs of less-than-baccalaureate level were (1) its delegation to other state institutions, (2) its inconsistency with institutional purposes, (3) the lack of adequate facilities, and (4) the lack of sufficient funds.

TABLE IX

PLANS FOR ADDITION OF LESS-THAN-BACCALAUREATE LEVEL TECHNICAL EDUCATION PROGRAMS IN INSTITUTIONS NOT OFFERING SUCH PROGRAMS AT PRESENT

Institutional Enrollment	Plan To Add Programs	Do Not Plan To Add Programs	Unknown Or No Response	Total
Less than 5,000	10	67	28	105
5,000 - 10,000	3	26	8	37
10,000 - 15,000		9	3	12
Over 15,000		12	2	14
Total	13	114	41	168

TABLE X

PLANNED DURATION AND YEAR TECHNICAL EDUCATION PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL ARE TO BE ADDED IN INSTITUTIONS NOT CURRENTLY OFFERING SUCH PROGRAMS

	Year Programs Are To Be Added In Institutions With Enrollment										
	Less than 5,000					5,000 - 10,000					
Planned Program Duration	67-68	68-69	69-70	Year Unk.	Total	67-68	68-69	69-70	Year Unk.	Total	Total
More than 3, less than 4 years		3			3						3
2 years	9	9	1	5	24			1		1	25
1 year	2	2	1	2	7						7
Unknown							4	1		5	5
Totals: 67-68	11										11
68-69		14					4				18
69-70			2					2			4
Yr. Unk.				7							7
Programs					34					6	40

TABLE XI

REASONS WHY LESS-THAN-BACCALAUREATE LEVEL TECHNICAL EDUCATION PROGRAMS ARE NOT TO BE ADDED IN INSTITUTIONS NOT CURRENTLY OFFERING SUCH PROGRAMS

Reasons Given For Not Adding Programs	Frequency of Response By Institutional Enrollment				
	Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000	Total
Technical education is a function delegated to other institutions in the state	59	23	7	10	99
Technical education is inconsistent with institutional purposes	32	11	4	7	54
Inadequate facilities available	9	5	2	1	17
Insufficient funds available	8	2	2	1	13
Insufficient student interest in such programs	6	2			8
Insufficient demand for graduates of such programs	7	1			8
Faculty opposition to such programs	2	3	2		7
New programs will lead to the baccalaureate degree	2				2
Programs of less-than-baccalaureate level should not be on the same campus with those of baccalaureate level	1	1			2
More pressing needs are to be met		1			1
Total	126	49	17	19	211

Less-Than-Baccalaureate Level Curricula Currently Offered in Participating Institutions

Data regarding the variety and distribution of less-than-baccalaureate level technical education programs currently offered in participating institutions are presented in Table XII. As indicated, 150 different program titles appear in current offerings.

TABLE XII

TECHNICAL PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Technical Programs	Program Duration in Years										Total No. of Programs	Institutional Enrollment			
	3+ -4	3	2-1/2	2	1-1/2	1-1/3	1	2/3	Less Than 1/2	Unspecified		Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000
Accounting				7							7	4	3		
Aeronautical				2							2	1		1	
Agricultural Business				4							4	1		1	2
Agriculture (unspecified)	1	7		22			2		2		34	9	18	2	5
Agriculture for Young Farmers								1			1				1
Aircraft				1			1				2		2		
Allied Health				3							3	2		1	
Animal Science				3							3		2	1	
Appliance Repair						1					1	1			
Applied Plant Science				1							1		1		
Arboriculture and Park Management				1							1			1	
Architectural				1							1				1
Architectural Drafting				2							2		2		
Art				1							1		1		
Auto-Body						1	1				2	2			
Auto Mechanics				4			1				5	5			
Automotive				6							6	2	3		1
Automotive Service Management				1							1	1			
Aviation				2							2				2
Bakery						1					1	1			
Bookkeeping				1							1			1	
Bricklaying				1							1	1			
Building Construction	2			5							7	5	1	1	
Building Trades				1							1	1			
Business (unspecified)				18			2				20	12	8		
Business, General				3			1				4		1	2	1
Business Administration				1							1		1		
Business Data Programming				1							1			1	

TABLE XII (continued)

TECHNICAL PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Technical Programs	Program Duration in Years										Total No. of Programs	Institutional Enrollment			
	3+ -4	3	2-1/2	2	1-1/2	1-1/3	1	2/3	Less Than 1/2	Unspeci- fied		Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000
Business Office				1			1				2				2
Business Management				2							2		1	1	
Cake Decorating									1		1	1			
Carpentry				1							1	1			
Chemical				10							10	3	3	1	3
Chemical Engineering		1									1		1		
Civil		2		6							8	3	3	1	1
Civil Engineering							1				1		1		
Clerical				2							2	2			
Commerce				2							2		1		1
Commercial Art and Advertising				1							1	1			
Commercial Illustration and Design				1							1			1	
Computer				2							2		1		1
Concrete									1		1	1			
Cosmetology							1				1		1		
Culinary Arts				1		1					2	2			
Cytology				1							1				1
Dairy Science				2							2		1		1
Data Processing	1			6							7	2	4	1	
Dental Assistant				4			4				8		5	1	2
Dental Hygiene		1		7							8	3	1	2	2
Design				2							2	2			
Diesel				3			1				4	3	1		
Distribution				1							1				1
Drafting		1		16			1				18	11	5		2
Drafting and Design				3							3		3		
Electrical				12			1				13	8	2	2	1
Electronics		4	1	23			1				29	16	9	1	3
Electronics Servicing				1							1	1			

TABLE XII (continued)

TECHNICAL PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Technical Programs	Program Duration in Years										Total No. of Programs	Institutional Enrollment			
	3+ -4	3	2-1/2	2	1-1/2	1-1/3	1	2/3	Less Than 1/2	Unspecified		Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000
Elevator and Farm Supply					1						1				1
Engineering (unspecified)				23							23	13	5	4	1
Engineering Design		1									1		1		
Farm Equipment Sales and Service					1						1				1
Farm Machinery				2							2	1	1		
Farm Mechanics				1							1				1
Farm Operators				1							1	1			
Fire Protection				1							1	1			
Floriculture				1							1			1	
Food Service				5							5			2	3
Food Service Management				2							2		2		
Forestry				3							3		2		1
Fruit and Vegetable Crops				1							1			1	
Furniture Finishing and Upholstery	1				1	1					3	3			
General				4							4		4		
Heating, Air Conditioning and Refrigeration				1							1			1	
Highway and Civil				1							1		1		
Home Economics (unspecified)				1							1		1		
Homemaking				1					1		2		1	1	
Horticulture				1							1	1			
Hotel and Food Service				1							1				1
Illustration				1							1				1
Industrial				3							3	1	1		1
Industrial Design Drafting				1							1			1	
Industrial Illustration				2							2		2		
Instrumentation				1							1			1	
Key Punch									1		1	1			
Laboratory				2							2	1	1		
Laboratory Animal Management				1							1			1	

TABLE XII (continued)

TECHNICAL PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Technical Programs	Program Duration in Years										Total No. of Programs	Institutional Enrollment			
	3+ -4	3	2-1/2	2	1-1/2	1-1/3	1	2/3	Less Than 1/2	Unspecified		Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000
Landscape				2							2			2	
Landscape and Nursery Management				1							1				1
Laundry and Dry Cleaning				1		1					2	2			
Law Enforcement				9			1				10	2	6	1	1
Linotype									2		2				2
Lumber and Building Materials - Business Management				1							1			1	
Machine Drafting				1							1		1		
Machine Tool				2							2	2			
Manufacturing				1							1				1
Marketing				1							1		1		
Mechanical	2			9							11	4	3	2	2
Mechanical Engineering	1										1		1		
Medical	4			2			1				7	4	1	2	
Mental Health				1							1				1
Merchandising				2							2		2		
Metallurgical				2							2		1		1
Metals				3							3	3			
Mineral							1				1	1			
Mortuary Science	1										1				1
Nurse Anesthesiology					1						1				1
Nursing	2			20			6			1	29	7	11	3	8
Office Administration				1							1	1			
Office Occupations				1							1			1	
Ornamental Horticulture				1							1		1		
Orthoptic	1						1				2				2
Petroleum				1							1	1			
Petroleum Distribution				2							2				2
Pharmacy				1							1		1		

TABLE XII (continued)

TECHNICAL PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Technical Programs	Program Duration in Years										Total No. of Programs	Institutional Enrollment			
	3+ -4	3	2-1/2	2	1-1/2	1-1/3	1	2/3	Less Than 1/2	Unspecified		Less Than 5,000	5,000 To 10,000	10,000 To 15,000	Over 15,000
Photographic				1							1		1		
Physical Therapy							1				1				1
Plastics				1							1		1		
Plumbing				2							2	2			
Police Science				1							1			1	
Power Mechanics				1							1			1	
Printing	1			6							7	3	3	1	
Public Administration							1				1		1		
Public Health									1		1		1		
Public School Nurse		1									1	1			
Quality Control									1		1	1			
Radiation				1							1	1			
Radiological				1	1						2				2
Recreation Supervision				1							1		1		
Refrigeration and Air Conditioning				4							4	2	2		
Restaurant and Hotel Management				1							1			1	
Retailing				3							3		1	1	1
Science				1							1		1		
Secretarial Science	1			30		1	6				38	8	20	5	5
Shoe, Boot and Saddle Repair				1							1	1			
Soil					1						1				1
Soil, Water and Conservation					1						1		1		
Stenographic		1		3			1				5	1	4		
Surveying		1		1							2		1		1
Technical (unspecified)				21								21			
Technology (unspecified)				8							8	7			1
Teletypesetter									1		1	1			

TABLE XII (continued)

TECHNICAL PROGRAMS OF LESS-THAN-BACCALAUREATE LEVEL PRESENTLY OFFERED IN PARTICIPATING INSTITUTIONS

Technical Programs	Program Duration in Years										Total No. of Programs	Institutional Enrollment			
	3+ -4	3	2-1/2	2	1-1/2	1-1/3	1	2/3	Less Than 1/2	Unspecified		Less Than 5,000	5,000 To 10,000	10,000 to 15,000	Over 15,000
Tool				2							2		2		
Turf Management				1			1				2			2	
Turf and Grass Management				1							1				1
Watchmaker and Micro-Instrumentation				1							1	1			
Welding				1							1		1		
Wood				2							2	1	1		
Wood, Paper and Pulp				1							1		1		
Wood Utilization				1							1			1	
X-Ray	1			6							7	2	1		4
Specific Area Not Given	1	2		73			5				81	43	17	5	16
Total	6	36	1	505	6	7	45	1	11	1	619	254	198	66	101

APPENDIX A

EASTERN KENTUCKY UNIVERSITY

RICHMOND, KENTUCKY 40475

OFFICE OF THE PRESIDENT

February 1, 1967

Eastern Kentucky University is cooperating with the Association of State Colleges and Universities and the National Association of State Universities and Land Grant Colleges in a research project designed to ascertain the current status of less than baccalaureate level technical education programs in institutions of higher education. From this study we hope to identify both the extent of <u>current</u> involvement in such programs and <u>projected</u> involvement by 1970.

One purpose of this study is to give adequate recognition nationally to the role that state and land grant colleges and universities now play in meeting educational needs at the associate degree or less than baccalaureate degree levels. This information might also be useful in the preparation of testimony by the two associations before appropriate congressional committees and in dealing with federal agencies.

For the purpose of this study, technical education programs are defined as those occupational curricula that combine general education with technical information and practical skill development experiences necessary for individuals who wish to enter into and subsequently succeed in occupations that require an understanding of the laws of science and technology and their application in our society. I would emphasize, however, that we are concerned with all associate degree and less than baccalaureate level programs.

I wish to solicit your cooperation in this endeavor and request that you complete the enclosed information forms. The forms have been constructed to facilitate speed in completion and thereby minimize the imposition being made upon your busy schedule. In addition, I will appreciate any additional comments you wish to record on the back of the information forms, and any supplementary materials which you may wish to forward to me. You have my assurance that <u>all</u> information contributed will be treated in a manner that will not identify institutions or individuals, and you will be provided with a summary of the results of the study.

Won't you please respond to the items included in the forms, place in the stamped envelope provided for your use, and drop in the <u>outgoing</u> mail today?

Please accept my thanks, in advance, for your cooperation.

Cordially yours,

Robert R. Martin

Robert R. Martin
President

Enclosures

APPENDIX B

INFORMATION FORM FOR TECHNICAL EDUCATION PROGRAMS OF LESS THAN BACCALAUREATE LEVEL OFFERED ON THE MAIN CAMPUS

Directions: Please respond below to items 1, 2, 3, and others applicable as indicated. Although the form is designed to facilitate ease and speed in completion, please feel free to expand response categories where necessary.

1. What is the current total student enrollment in your institution? _____.
2. Are baccalaureate level technical programs being offered at your institution? ☐ YES ☐ NO
3. Are technical programs of less than baccalaureate level currently being offered at your institution? ☐ YES ☐ NO

If you checked YES in 3 above, please complete only applicable items 4 through 7 and respondent item 11 below.
If you checked NO in 3 above, please complete only applicable items 8 through 10 and respondent item 11 below.

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APPENDIX C

INFORMATION FORM FOR TECHNICAL EDUCATION PROGRAMS OF LESS THAN BACCALAUREATE LEVEL OFFERED OFF-CAMPUS IN EXTENSION CENTERS, COMMUNITY COLLEGES, ET CETERA

Directions: Please respond below to items 1, 2, 3, and others applicable as indicated. Although the form is designed to facilitate ease and speed in completion, please feel free to expand response categories where necessary.

1. What is the current total student enrollment in your institution? _____.
2. Are baccalaureate level technical programs being offered at your institution? ☐ YES ☐ NO
3. Are technical programs of less than baccalaureate level currently being offered at your institution? ☐ YES ☐ NO

If you checked YES in 3 above, please complete only applicable items 4 through 7 and respondent item 11 below.
If you checked NO in 3 above, please complete only applicable items 8 through 10 and respondent item 11 below.

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